

CLAIMS

Claims:

1. A device for facilitating hearing, the device comprising:
an earpiece configured to be captured at least partially within the conchae of an ear;
and wherein the earpiece is configured for use in either ear.
2. The device as recited in claim 1, wherein the earpiece comprises detents configured to be captured by the conchae.
3. The device as recited in claim 1, wherein the earpiece is configured to be captured by protrusions of the conchae.
4. The device as recited in claim 1, wherein the earpiece is configured to be captured at least partially by the antihelix of the ear.
5. The device as recited in claim 1, wherein the earpiece is generally symmetric.
6. The device as recited in claim 1, wherein the earpiece is generally symmetric about a plane that bisects the earpiece.
7. The device as recited in claim 1, wherein the earpiece is generally symmetric about a plane that bisects the earpiece between the top and bottom thereof.
8. The device as recited in claim 1, wherein the earpiece is configured such that one size thereof fits a range of sizes of ears.
9. The device as recited in claim 1, wherein the earpiece is configured such that one size fits most adult ears.
10. The device as recited in claim 1, wherein the earpiece is configured such that one size fits approximately 70% of the ears of men between 19 and 40 years old.
11. The device as recited in claim 1, wherein the earpiece is comprised of at least one rib.

12. The device as recited in claim 1, wherein the earpiece is comprised of at least one generally arcuate rib and at least one generally vertical rib, the generally vertical rib extending between points proximate ends of the arcuate rib.
13. The device as recited in claim 1, wherein the earpiece is comprised of two ribs that are generally configured to define a D.
14. The device as recited in claim 1, further comprising a boss having a bore formed therethrough, the boss being configured to extend at least partially into the ear canal.
15. The device as recited in claim 1, wherein the earpiece is formed of a resilient polymer.
16. The device as recited in claim 1, wherein the earpiece is formed of a resilient polymer having a Shore A durometer of between approximately 35 and approximately 45.
17. The device as recited in claim 1, wherein the earpiece is formed of a resilient polymer having a Shore A durometer of approximately 40.
18. The device as recited in claim 1, wherein the earpiece is formed by injection molding.
19. The device as recited in claim 1, further comprising an acoustic conduit for communicating sound to the earpiece.
20. The device as recited in claim 1, further comprising:
 - a transducer formed to the earpiece; and
 - an electric conduit for communicating a signal representative of sound to the transducer.
21. The device as recited in claim 1, further comprising:
 - a radio; and
 - a conduit for transferring information from the radio to the earpiece.

22. A portable communication system comprising:
a radio;
an earpiece configured to be captured at least partially within the conchae of an ear;
a conduit configured to communicate information from the radio to the earpiece;
and wherein the earpiece is configured for use in either ear.
23. The portable communication system as recited in claim 22, wherein the conduit comprises acoustic tubing.
24. The portable communication system as recited in claim 22, further comprising at transducer disposed proximate the earpiece and wherein the conduit comprises an electrically conductive conduit.
25. A method for manufacturing an earpiece, the method comprising:
forming an earpiece from a polymer material;
wherein the earpiece is configured to be captured at least partially within the conchae of an ear; and
wherein the earpiece is configured for use in either ear.
26. The method as recited in claim 25, wherein the polymer material comprises a resilient polymer material.
27. The method as recited in claim 25, wherein the earpiece is formed by injection molding.
28. A method for using a portable communication system, the method comprising:
inserting an earpiece into the ear such that the earpiece is held in place at least partially by the conchae; and
wherein the earpiece is configured for use in either ear.
29. A method for using an earpiece, the method comprising:
removing the earpiece from one ear; and

placing the earpiece in the other ear such that the earpiece is held in place at least partially by the conchae.

30. A method for using an earpiece, the method comprising:

inserting an earpiece into the ear without regard as to which ear the earpiece is configured to be used in; and

wherein the earpiece is held in place at least partially by the conchae.

31. A method for using an earpiece, the method comprising removing an earpiece from the conchae of one ear and inserting the earpiece into the conchae of other ear.

32. An earpiece configured to be captured within the conchae of an ear by at least one of:

an antihelix;

a back rim of the conchae;

a tragus; and

an antitragus.

33. The earpiece as recited in claim 32, wherein a portion thereof is captured between the crus of helix (within the conchae) and the antihelix.

34. The earpiece as recited in claim 33, wherein the earpiece is comprised of ALPHA PVC 3019-40/45.

35. An earpiece comprising:

a body that is configured for use in either ear; and

a acoustic coupler having a bore formed therein, the acoustic coupler being configured so as to facilitate attached of acoustic tubing to the earpiece.